

1st Street 2-way Conversion Study



ALLIANT

Outline

- Study Purpose/Scope
- Project Benefits
- Examples
- Considerations
- Proposed Concept
- Proposed Traffic Control Devices
- Next Steps



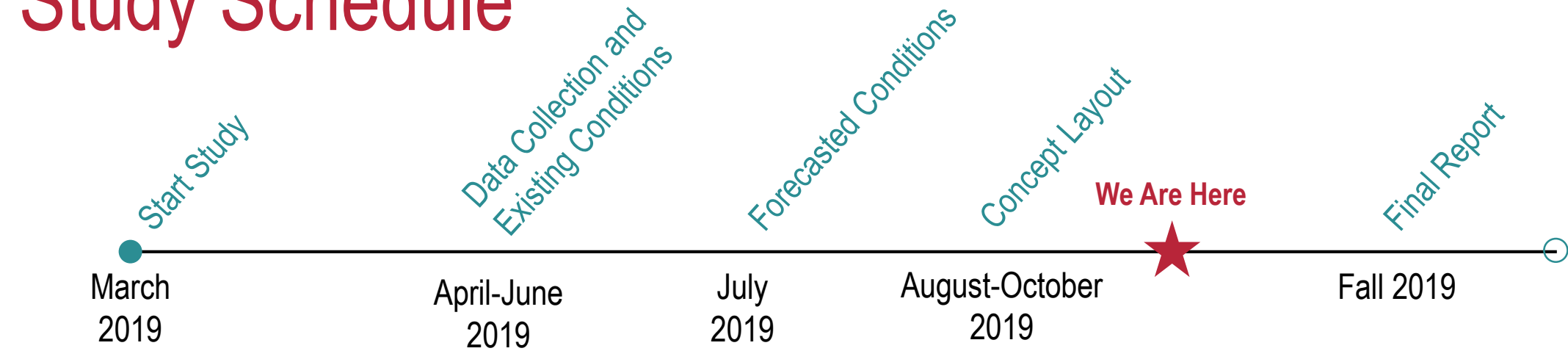
Source: Google

Study Purpose/Scope

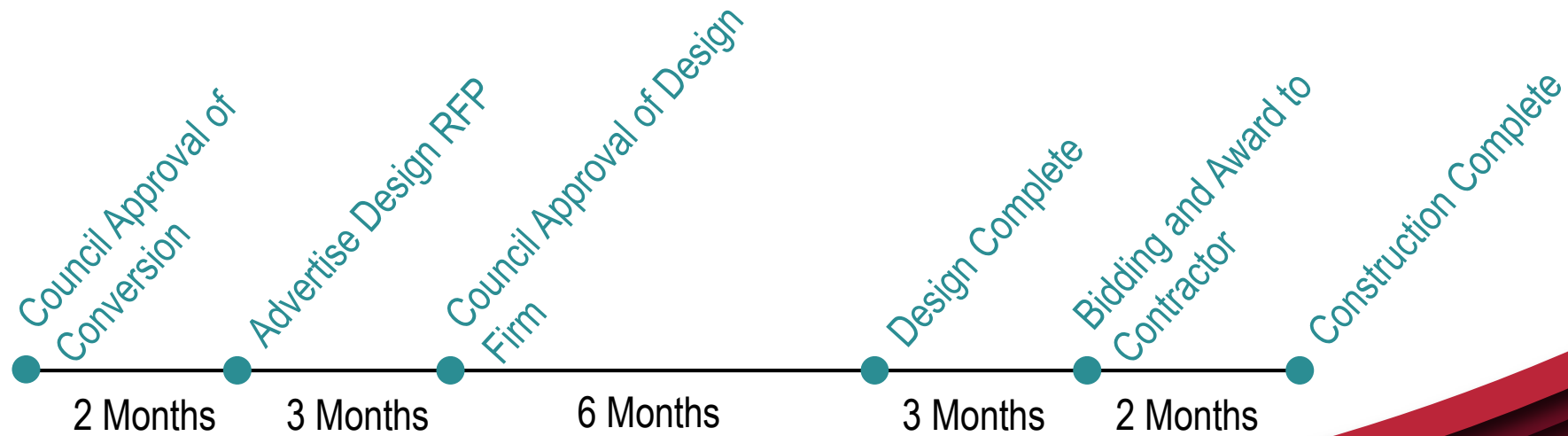


- Improve safety!
- Improve access and circulation
- Downtown is changing!
- Conversion limited to signing, marking, and traffic control changes only

Study Schedule



 **Obtain CIP Funding**



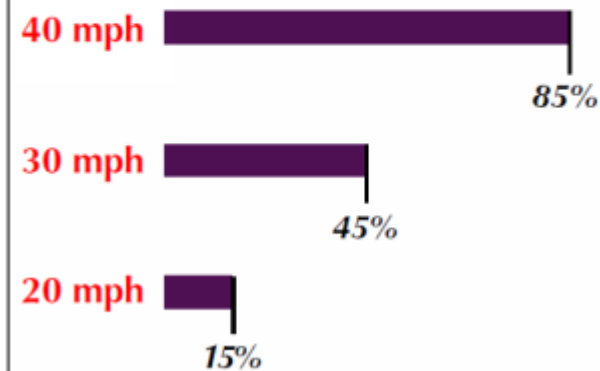
Benefits

- Traffic Calming
- Convenience/Economics
- Traffic Mobility
- Residential Access

Average Roadway Speeds	
BEFORE Conversion:	30-45 mph
AFTER Conversion:	20-25 mph

"Converting One-way Streets to Two-way"
www.preservationnation.org

When a person is struck by a motor vehicle, they have the following **chances of death** according to *Killing Speed and Saving Lives*, UK Department of Transportation:



Oregon Main Street Handbook: When a highway runs through it!



New Albany, IN Source: cnu.org

Example Conversions



Cedar Rapids, IA Source: cnu.org

- 1st, 2nd, and 3rd Avenues, Duluth, MN
- Hennepin and 1st Avenues, Minneapolis, MN
- East Wells Street, Milwaukee, WI
- Downtown CBD, Cedar Rapids, IA
- East Spring Street, New Albany, IN
- Main and 2nd Streets, Ottumwa, IA
- Court and Walnut Avenues, Des Moines, IA

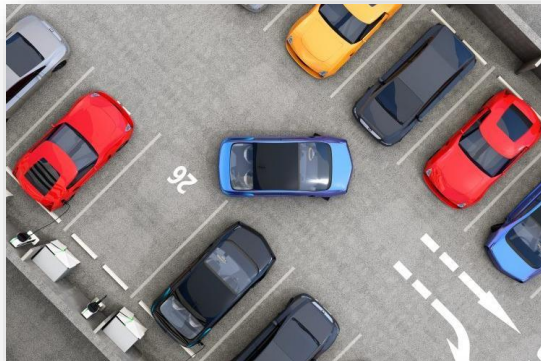
Considerations



**Traffic Operations /
Intersection Control**



**Business and
Truck Access**



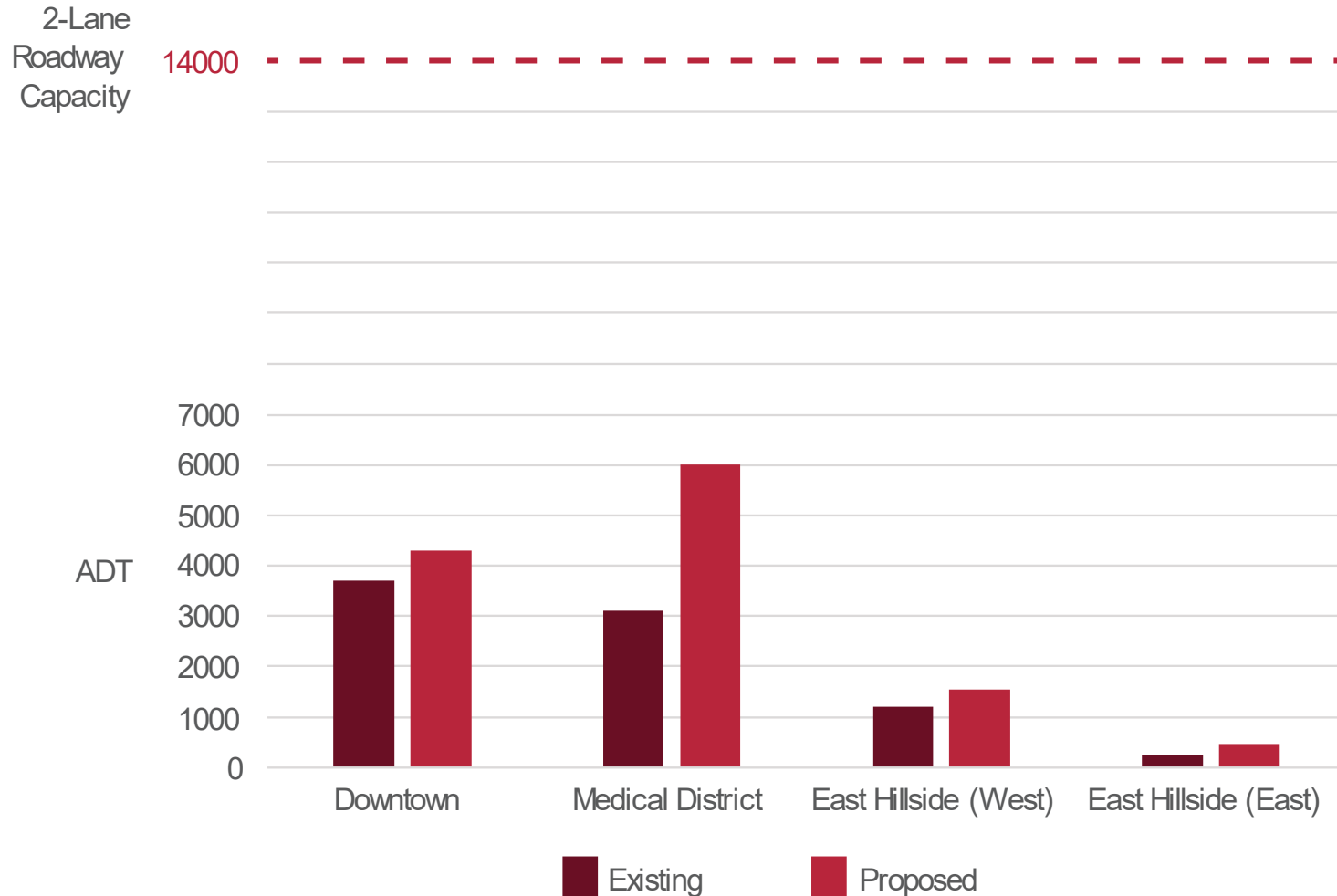
Parking Impacts



**Pedestrian and
Transit Impacts**

Traffic Operations / Intersection Control

- How will traffic operate under two-way conditions?
- What type of intersection traffic control will there be under two-way conditions?



- Findings

- Conversion will have acceptable levels of service along corridor
- Opportunity to revise intersection traffic controls.

Parking Impacts



Source: Google

- How will on-street parking be impacted?
- How will off-street parking be impacted?
- Findings:
 - Conversion will not impact on-street parking or existing loading operations.
 - No property access (ingress/egress) operational changes needed

Business and Truck Access

- How will business access be impacted?
- How will truck access be impacted?
- Findings:
 - Business access will be greatly improved with logical circulation
 - Existing loading zones remain for conversion. No Changes.
 - In-lane loading (illegal) must shift to loading zones, side streets, or alleys.



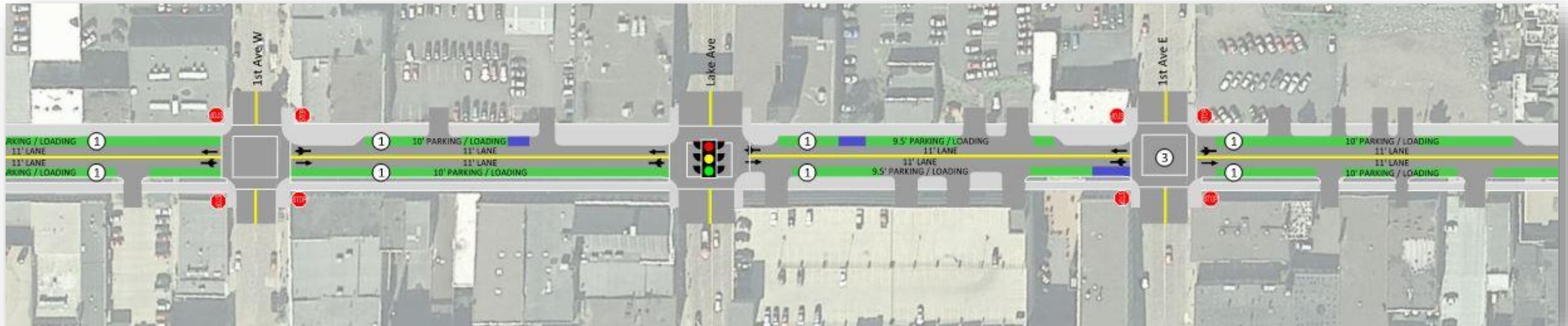
Pedestrian and Transit Impacts

- How will pedestrians be impacted?
- How will transit be impacted?
- Findings:
 - Conversion will help lower vehicle speeds which will reduce severity of pedestrian crashes
 - On-street parking “buffer” between pedestrians and roadway will remain
 - Transit operations will not be impacted



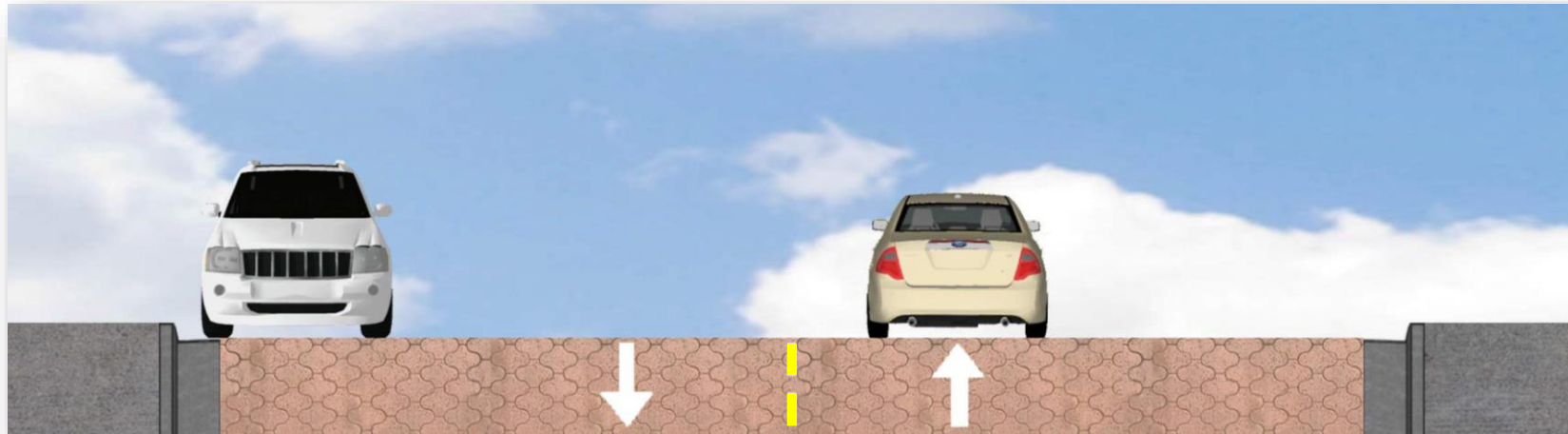
Source: Google

Proposed Concept

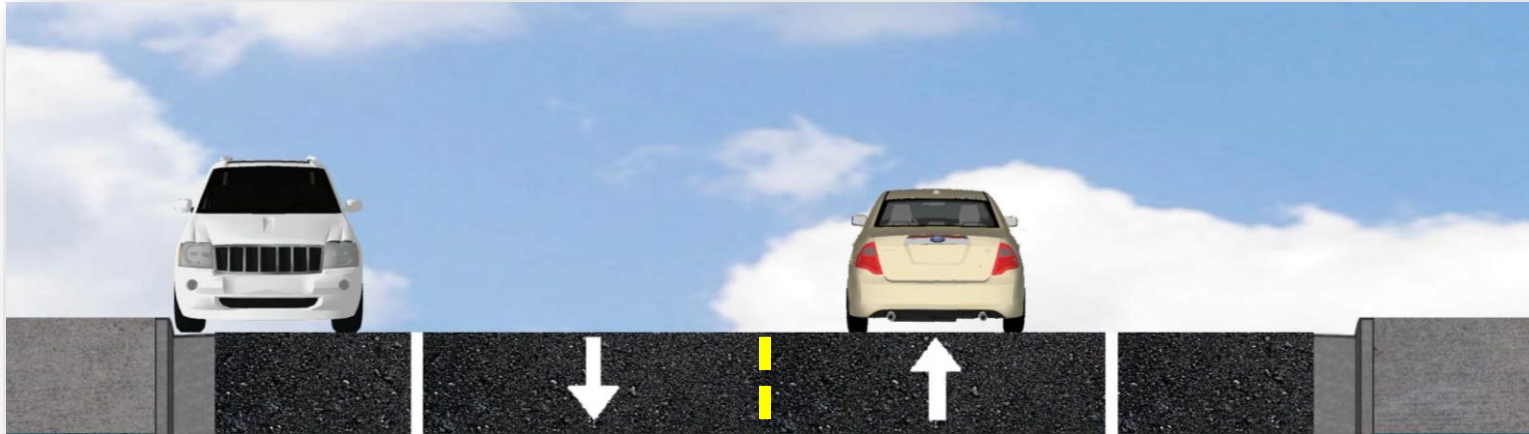


- Two travel lanes
- On street parking/loading spaces will continue on both sides of street
- Changes to traffic control devices at some intersections

Downtown Segment (Mesaba Ave to 4th Ave E)

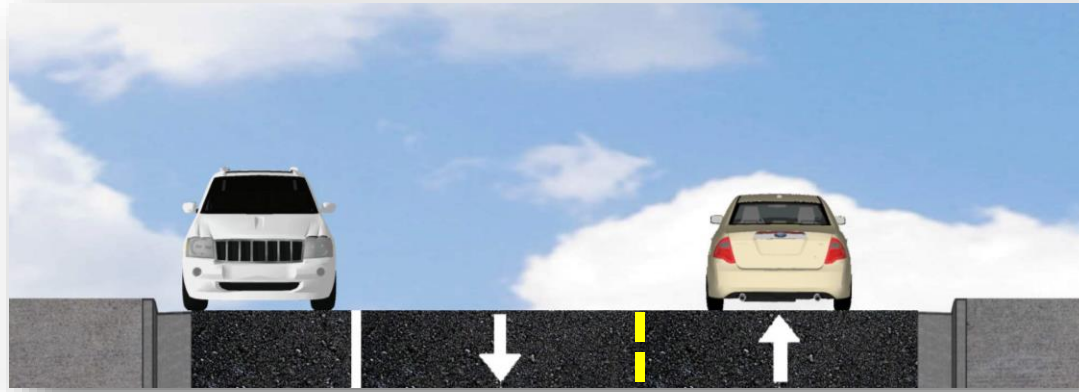


Medical District Segment (4th Ave E to 12th Ave E)

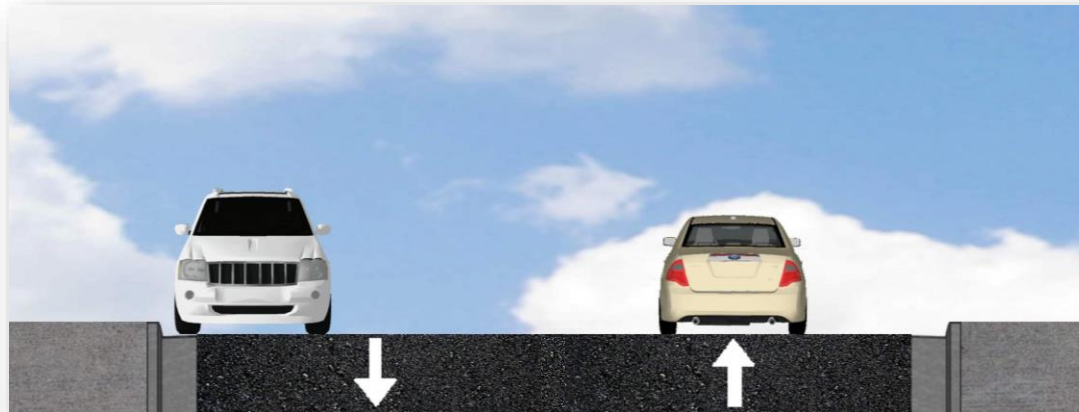


East Hillside Segment (12th Ave E to 24th Ave E)

West of 21st Avenue E



East of 21st Avenue E



Traffic Control Change Benefits



- Traffic controls serve specific need
- State/Federal standards guide installation
- Balance standards with intersection characteristics
- Signal removal results in annual maintenance, electrical and operation savings



Source: Google

